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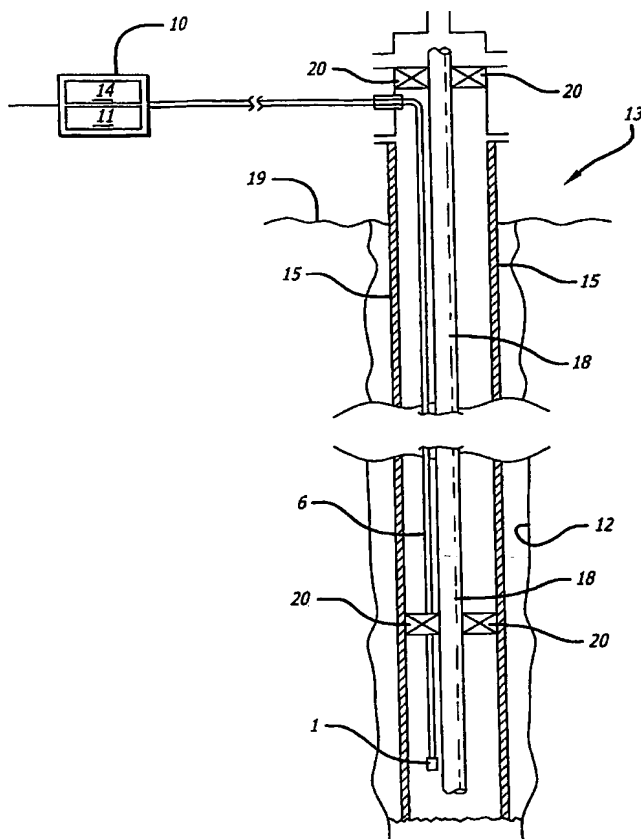
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(54) Title: SYSTEM AND METHOD FOR DEPLOYING AN OPTICAL FIBER IN A WELL



(57) Abstract: A fiber optic sensor assembly capable of deployment down an instrumentation tube located in a well bore, including a flexible protective tube having a lumen encasing an optical fiber having a core portion and a cladding portion disposed within the flexible tube. The flexible protective tube protects the optical fiber from the oil, water or hydrogen gas within the well bore. A method of deploying the optical fiber down the well bore, is also provided. An optical fiber having a core and a cladding surrounded by the flexible protective tubing is deployed into the lumen of a tube disposed within the well bore by pumping a high pressure fluid into the lumen of the tube, thereby causing the deployment of the optical fiber down the well bore. The protective tubing is impermeable to hydrogen and other corrosive materials.



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